

PERFORMANCE QUALIFICATION STANDARDS BOOK FOR MARINE INSPECTORS

The Performance Qualification Standards (PQS) Book for Marine Inspectors lists the on-the-job training (OJT) tasks that must be completed to obtain various marine inspector qualifications. The original Marine Inspector PQS books have been revised to update tasks, establish consistency between Marine Safety units, and provide a more user-friendly form of guidance for achieving marine inspector qualifications. Recognizing that many tasks were repeated in the previous PQS books, a matrix has been developed to identify 1) each task, and 2) the vessels to which the tasks pertain, eliminating redundancy in task performance for qualification. A brief overview of this book may help in understanding how it works. The revised PQS OJT qualification book is divided into three parts:

- **Master Vessel Qualification Record**
 - **Master Matrix and Task Completion Record**
 - **PQS Workbooks**
- **Master Vessel Qualification Record:** This one-page document is used to record the date in which a particular inspection qualification was obtained. This record can easily be used by supervisors to measure marine inspector accomplishments and identify qualifications held by marine inspectors at their port. It is also a ready-reference to be used when changing commands as to the inspection qualifications held by an individual.
 - **Master Matrix and Task Completion Record:** This section of the book is divided into 22 categories according to tasks:

Accommodation	Cargo System
Drydock	Emergency Drill
Emergency Equipment	Electrical System
Firefighting	Forms and Publications
Ground Tackle	Initiating an Inspection
Liftboat	Liferaft
Lifesaving Equipment	Machinery
Navigation System	Pollution Prevention
Required Training	Stability
Underwater Survey	Ventilation System
Watertight Integrity	Welding Repair

Each of the 22 categories is divided into 2 parts: a Qualification Matrix, and a Task Description.

The *Qualification Matrix* identifies each item in that category by task number and a short description. It also shows which tasks in that category are required to qualify for each specific inspection qualification. Using the matrix, an individual can, at a glance, see

which tasks are performed under a particular category. The matrix also indicates which PQS qualification requires a task to be accomplished. A portion of the Firefighting Task matrix is provided below as an example. Column 1 lists the task number, column 2 gives a brief description of the task, and the remaining columns (all of which are not shown in this example) list the various inspection qualifications. When an “X” appears in a block under a inspection qualification heading, the corresponding task is required to be completed.

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	(Etc.)
FF01	Determine amount, type, location of fire protection equipment required.	X				X		X		X	
FF02	Inspect CO ₂ systems.					X		X		X	
FF03	Examine fixed gas firefighting system servicing report.		X		X						

The *Task Description* describes, in general, the task to be accomplished. It lists specific details that must be addressed to successfully demonstrate competency to a verifying officer. Next to the task are two columns: one to record the date, and one for the verifying officer to initial when the requirement has been met. The following example corresponds to the example matrix listed above.

<u>Task Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
FF01	Determine amount, type and location of fire protection equipment required. <ul style="list-style-type: none"> By the vessel's Certificate of Inspection By the respective regulations 	_____	_____
FF02	Inspect fixed CO ₂ systems. <ul style="list-style-type: none"> Test sirens and time delays Obtain servicing reports Bottles underweight Flexible loops serviced and tested Diffuser heads clear Access to CO₂ room free of obstruction Hydrostatic test required by regulations Instructions posted 	_____	_____
FF03	Examine fixed gas firefighting system servicing report.	_____	_____

Once a task has been mastered and signed by the verifying officer, that task number does not have to be repeated. Remember that the verifying officer must initial the *Master Matrix and Task Completion Record* for the marine inspector to be credited for accomplishing the task.

- **PQS Workbooks:** The PQS workbooks are designed to be removed from the master binder and carried by the marine inspector into the field. This workbook provides the marine inspector with a portable task list as well as a place to document experiences and record achievements. There is an individual workbook for each of the 15 inspection qualifications:

BI Barge Inspector
CV Control Verification Inspector

DI	Drydock Inspector
FV	Foreign Freight Vessel Inspector
HI	Hull Inspector
HT	Hull Inspector (Tankship)
KI	K-Boat Inspector
LR	Liferaft Inspector
MI	Machinery Inspector
ML	Foreign Chemical Tank Vessel Inspector
MS	Machinery Inspector (Steam)
MU	Mobile Offshore Drilling Unit Inspector
OI	Offshore Supply Vessel Inspector
TI	T-Boat Inspector
TV	Foreign Tank Vessel Inspector

Each workbook begins with a task matrix that identifies which task from the *Master Matrix and Task Completion Record* is required in order to meet that workbook's specific qualification. A column to record the date that each task was completed is provided so the marine inspector can easily measure their progress towards completing the qualification. A portion of the CV Qualification task matrix is provided below as an example.

TSK #	TASK	DATE
AC03	Inspect berthing accommodations for compliance with ILO 147.	
DD05	During a foreign vessel examination, evaluate shell plating for damage.	
ED02	Observe drills during a control verification exam.	

Following the task matrix is a complete description of each task for that qualification. This task description is the same as it appears in *the Master Matrix and Task Completion Record*, but only those tasks that are required by the specific qualification appear in the workbook. Again, two columns are provided to record the date the task was completed and to identify the verifying officer. The following example corresponds to the example matrix listed above.

<u>Task Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
AC03	Inspect berthing accommodations for compliance with ILO 147. <ul style="list-style-type: none"> • Protection against weather and sea • Minimal steam supply and exhaust piping • Sufficient drainage • (Etc.) 	_____	_____
DD05	During a foreign vessel examination, evaluate shell plating for damage.	_____	_____
ED02	Observe emergency drills during a control verification exam. <ul style="list-style-type: none"> • Crew members report to their proper stations • Individual designated as person-in-charge conversant with duties and procedures to be followed • (Etc.) 	_____	_____

At the end of each workbook are several pages to record the marine inspector's inspection history. On these pages the marine inspector should record the date, location, vessel name, vessel class, inspection type, and lead inspector for each inspection activity. This will allow the unit training officer to access the marine inspector's experience on this type of inspection and verify that the trainee has benefited from working with a variety of qualified marine inspectors.

Once the following requirements have been met, the marine inspector will receive a letter of designation from the command:

1. Meet applicable OJT requirements as indicated in the PQS workbook.
2. Complete any necessary schools or correspondence courses.
3. Be recommended for and successfully pass a qualification board.

NOTE: *In addition to revising the original marine inspector qualifications, four new marine inspector qualifications have been created to reflect current inspection needs and to better identify the inspection capabilities of marine inspectors. These changes include the following:*

- Hull Inspector (HI) / Hull Inspector (Tankship) (HT)—Dividing this single qualification into two allows those inspectors in ports where tank vessel arrivals are scarce to achieve an HI qualification. This meets two needs: 1) to qualify an individual in a major qualification so that he or she is eligible to attend the advanced marine inspector resident courses, and 2) to allow managers and supervisors to more fully identify the capabilities of their personnel. A review of HT tasks reveals that this qualification builds on the HI qualification with the inclusion of tankship-specific tasks.
- Machinery Inspector (MI) / Machinery Inspector (Steam) (MS)—As the number of vessels with main propulsion boilers and the inspection opportunities associated with these vessels diminish, it is becoming more difficult for an inspector to fully qualify as an MI. The need for MIs has prompted some units to “qualify” personnel by waiving the steam-specific tasks in the original MI qualification book. While this has provided the current unit with the “qualified” MIs necessary to support their workload, when transferred these personnel often fail to meet the needs of the new command. With the same benefits as the HI/HT qualification separation, the MS qualification also builds on the MI qualification with the inclusion of steam-specific tasks.
- T-boat Inspector (TI) / K-Boat Inspector (KI)—The old small passenger vessel qualification (SV) has also been divided into two qualifications: T-boat Inspector (TI) and K-Boat Inspector (KI). These new qualifications were created to more closely match the recent change in regulations. With the advent of Subchapter K, a significant number of differences exist between these two vessel types, warranting the need for a new qualification.
- Liferaft Inspector (LR)—Although already issued at some units, LR was officially added to the list of qualifications to bring consistency to Marine Safety units when issuing liferaft inspector qualification letters.